

## **REMARKS**

The Applicants' thank the examiner for the courtesy extended during an in person interview on October 7, 2004. The Applicants also thank the examiner for accommodating the travel schedule of Applicants' representative traveling from Japan.

At the interview, the following was discussed:

- (A) No exhibit was shown.
- (B) Existing claims 20, 31, and new claim 57, were discussed.
- (C) The following references were discussed:

JP 09-103849 (Arai)

USP 4,877,662 (Tanaka)

JP 05-7997 (Isao)

- (D) The following amendments were discussed:

**Claim 20** (currently amended): A cooling drum for metal cast strip by continuous casting, characterized in that: dimples 40 to 200  $\mu\text{m}$  in average depth and 0.5 to 3 mm in diameter of circle equivalent are formed on the plated peripheral surface of the cooling drum, adjacent to each other at the rims of said dimples; and a film, containing ~~a substance more excellent than Ni in wettability with~~ scum oxides of at least one member selected from the group consisting of Ni-W, Ni-Co-W, Cr, Ni-Fe and Ni-Al, is formed on said peripheral surface.

**Claim 31** (currently amended): A cooling drum for metal cast strip by continuous casting, characterized in that: the thermal conductivity of the base material of the drum is not less than 100 W/m K; an intermediate layer 100 to 2,000  $\mu\text{m}$  in thickness having the coefficient of thermal expansion of 0.50 to 1.20 times that of said drum base material and Vickers hardness Hv of not less than 150 is coated on the surface of said drum base material; a hard plated layer 1 to 500  $\mu\text{m}$  in thickness having Vickers hardness Hv of not less than 200 is applied on

the outermost surface; further on the surface, dimples 200 to 2,000  $\mu\text{m}$  in diameter and 80 to 200  $\mu\text{m}$  in depth are formed so as to contact each other or be adjacent to each other; and on the surface, fine holes 50 to 200  $\mu\text{m}$  in diameter and 30  $\mu\text{m}$  or more in depth are formed so as to have the pitch of 100 to 500  $\mu\text{m}$  but not to contact each other, wherein the fine holes are located inside each dimple.

**Claim 57 (new):** The cooling drum of claim 31, wherein the fine holes are located on the rim of each dimple.

(E) **Arguments:**

**Claim 20:** The Applicants argued that the proposed claim amendment overcomes the existing rejection, and the examiner agreed. However, it was also agreed that further search would be needed in view of the proposed claim amendment. Because the application is presently after final rejection, it was agreed to cancel claim 20, by examiners amendment, without prejudice to pursue the claim in a continuation.

**Claims 31 and 57:** The Applicants argued that the proposed amendment distinguishes over the current rejection based on Tanaka, because Tanaka does not disclose or suggest fine holes located inside each dimple (claim 31) and on the rim of each dimple (claim 57). The examiner agreed that the proposed amendment distinguishes over the current rejection, and agreed to make the amendment by examiner's amendment.

(F) The Applicants also raised an IDS that was submitted on July 21, 2004, with references that were recently cited in a foreign counterpart application, which the examiner needs to consider. The Applicants argued with respect to JP 05-7997 (Isao) that the limitations of claim 31 directed to the pitch of the fine holes, as well as the limitation that the fine holes "not contact each other" distinguishes over the "shot blast Z" of Isao, disposed

inside the “dent parts A,” which have a random distribution that does not meet these limitations. In addition, the Applicants argued that the purpose of the “shot blast Z” in Isao is to rejuvenate a drum having “dent parts A” that are worn, and that this purpose is different from the surface features of claims 31 and 57. (see specification, pages 18-19).

(G) It was agreed that the examiner would enter the proposed amendment to claim 31 and add claim 57 as proposed above in (D) by examiner’s amendment, and cancel claim 20 by examiner’s amendment. It was agreed that these amendments overcome all pending rejections, and may place the case in condition for allowance. However, the examiner indicated that it would be necessary for him to consult with a PTO translator regarding Isao to see if there was any relevant disclosure in the Japanese language part of the reference that might affect the allowability of claim 31, and to more generally consider the references submitted on July 21, 2004 with respect to the whole application.

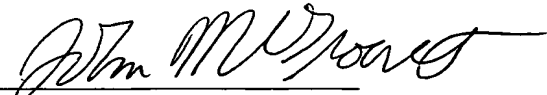
(H) There was no e-mail correspondence.

**CONCLUSION**

In view of the remarks herein, reconsideration and withdrawal of all pending rejections is respectfully requested. The Office is authorized to charge any additional fees or credit any overpayments under 37 C.F.R. § 1.16 or 1.17 to Deposit Account No. 11-0600.

Respectfully submitted,

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